



No.	Author <b>N. Budd Veverka, Farmland Game Research Biologist</b>	Date
986	Title <b>2009 Mourning Dove Call-Count Survey</b>	09/18/09

**Abstract:** In 2009, the Indiana Division of Fish and Wildlife (IDFW) participated in the national mourning dove call-count survey coordinated by the U.S. Fish and Wildlife Service. The IDFW has participated in this survey every year since 1966. The average number of mourning doves heard along 15 Indiana driving routes was slightly higher in 2009 than in 2008. The average number of doves heard along each route in 2009 (21.8 doves) increased 8.4% from 2008 (20.5 doves), but this difference was not statistically significant. Indiana's mourning dove breeding population has remained nearly unchanged over the last 10-year period, and has only insignificantly declined (−1.2%) over the long-term study (1966-2009).

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The mourning dove is one of the most widely distributed and abundant birds in North America and has a well-deserved reputation as a superbly challenging game bird. Mourning doves remain our most abundant upland game bird in Indiana and an estimated 15,000 hunters harvested approximately 258,400 doves in 2007. In fact, more doves are harvested in the Midwest than all other game birds combined. Because the species is migratory in nature, the U. S. Fish and Wildlife Service (USFWS) is responsible for its management. State fish and wildlife agencies, in cooperation with the USFWS, conduct an annual survey to monitor changes in mourning dove abundance. Survey data are used to monitor population trends in 3 survey units; the eastern, central, and western management units. Indiana is 1 of 27 states in the Eastern Management Unit participating in the annual surveys. Also, Indiana is 1 of 19 states within the Eastern Management Unit that permits dove hunting. The Indiana Division of Fish and Wildlife has cooperated with USFWS since the inception of the Mourning Dove Call-Count Survey in 1966.

## Methods

The Office of Migratory Bird Management of the

USFWS established 15 Indiana dove call-count survey routes in 1966. Each route was randomly located and consists of 20 listening points spaced at one mile intervals on secondary roads. Surveys begin ½ hour before sunrise, and are not conducted during rain, or when winds exceeded 12 mph. The number of individual doves heard during a 3-min listening period at each point was recorded. The number of doves seen, whether during the listening period or traveling between points, was also recorded. In 2009, Indiana Division of Fish and Wildlife biologists surveyed these 15 routes between 20 May and 29 May. USFWS personnel analyzed the data using linear regression models, and 2-year, 10-year, and 44-year trends were compared. Statistical significance was defined as  $P < 0.05$ , except for the 2-year comparison where  $P < 0.10$  was used due to the low power of the test.

## Results

Dolton et al. (2009), using linear regression models, calculated that 21.8 doves were heard per survey route during the 2009 survey in Indiana, while 20.5 doves were heard per survey route during 2008. Dolton et al (2009) found the number of calling doves heard per survey route in



2009 was 8.4% higher than the number heard in 2008, but was not a significant change. Over the last 10-year period, the number of mourning doves heard along survey routes in Indiana has fluctuated, but remained virtually unchanged (+0.4%). Over the 44-year study, the number of mourning doves heard along survey routes in Indiana has declined 1.2% per year while the entire Eastern Management Unit has declined 0.3%, but neither figure is considered statistically significant (Figure 1; Dolton et al 2009).

## Discussion

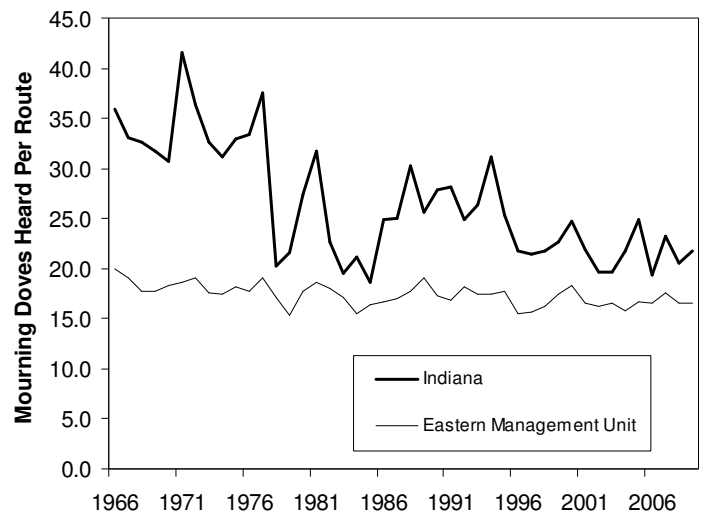
Compared to other states in the Eastern U.S., Hoosier dove hunters continue to enjoy a relative abundance of birds. The number of birds heard per route in 2009 was second only to North Carolina in the Eastern management Unit. Even with seasonal fluctuations, USFWS researchers (Dolton et al 2009) found the number of doves heard along Indiana call-count routes has remained virtually unchanged over the last 10 years (1999-2009). These results signify the fact that our population is healthy and that our current regulations and management approaches are appropriate. The Eastern management Unit, as a whole, has remained even more stable over the last 10 years than Indiana, but Indiana holds a higher index of doves per route. However, over the long-term study (1966-2009), the call count survey has shown an insignificant decline in the population of mourning doves in both Indiana and the EMU, with Indiana having a steeper decline over this time period (Figure 1). This steeper decline, though insignificant, can be most likely attributed to severe weather events, loss of habitat, and changes in grain production across Indiana.

There is no other game bird that can challenge the most experienced wing-shooter and provide the novice with numerous opportunities. Dove hunting provides a great opportunity to introduce youth or new hunters to the sport. However, there must be places available for these hunters to get this experience. Many dove hunters enjoy the managed public dove fields found at some reservoirs and fish and wildlife areas. However, the future of hunting and our upland game bird populations mostly depends upon the commitment of private landowners to provide access to hunters and to provide small game species with adequate habitat. Wildlife incentive

programs in the most recent farm bill provide monetary support to landowners willing to implement wildlife-friendly practices on their land. If you would like more information about these programs or would like to enroll your land, please visit your local USDA service center. In addition to federal programs, the Indiana Division of Fish and Wildlife administers several cost-share programs that provide monetary assistance to landowners willing to improve game bird habitat on their property. For additional information about these IDFW programs, contact your local district biologist or visit: <http://www.in.gov/dnr/fishwild>

## Literature Cited

Dolton, D.D., T.A. Sanders, and K. Parker. 2009. Mourning dove population status, 2009. Pages 1-22 in Mourning dove, white-winged dove, and band-tailed pigeon population status, 2009. U.S. Fish and Wildlife Service, Laurel, Maryland. USA.



**Figure 1.** Breeding Population Indices (number heard per route) for mourning dove from the annual Call-Count Survey, 1966-2009 (based on regression model; Dolton et al 2009). Along with indices for Indiana, indices are also shown for the entire Eastern Management Unit (EMU) which includes the states of Alabama, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Kentucky, Louisiana, Maine, Massachusetts, Michigan, Mississippi, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, Virginia, West Virginia, and Wisconsin.